## PATENT ABSTRACTS OF JAPAN

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on the winding of the relay 3, is controlled by the Zener diode 4. Accordingly, the voltage is reduced to

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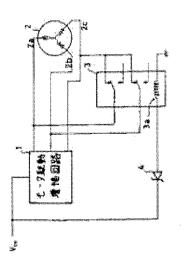
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## (54) DC MOTOR DRIVING CIRCUIT

## (57) Abstract:

PURPOSE: To effect high-speed ON/OFF control by connecting a Zener diode in series to the power supply line of a relay circuit. CONSTITUTION: When a power supply is intercepted, a relay 3 is switched into a condition that the upper terminals are connected and a circuit, connecting respective windings 2a-2c of a DC motor 2 to each other, is formed whereby the counter electromotive force of the DC motor 2, rotated by an inertia, is short-circuited. In this case, a voltage from a power supply line is impressed on the winding 3a of the relay 3 through a Zener diode 4, however, the voltage, applied



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the voltage of the returning operation of the relay 3 and, therefore, the returning operation is effected over a very short period of time. As a result, the relay 3 is returned to a condition that the lower terminals are connected again whereby the DC motor 2 can be driven quickly upon the next conduction of the current of the power supply.